#### § 38.97

not obstruct the clear floor space required. (See Fig. 2.)

## §38.97 Interior circulation, handrails and stanchions.

(a) Where provided, handrails or stanchions within the passenger compartment shall be placed to permit sufficient turning and maneuvering space for wheelchairs and other mobility aids to reach a seating location, complying with §38.95(d) of this part, from an accessible entrance. The diameter or width of the gripping surface of interior handrails and stanchions shall be 1½ inches to 1½ inches or shall provide an equivalent gripping surface. Handrails shall be placed to provide a minimum 1½ inches knuckle clearance from the nearest adjacent surface.

(b) Where provided, handrails or stanchions shall be sufficient to permit safe boarding, on-board circulation, seating and standing assistance, and alighting by persons with disabilities.

(c) At entrances equipped with steps, handrails or stanchions shall be provided in the entrance to the car in a configuration which allows passengers to grasp such assists from outside the car while starting to board, and to continue using such assists throughout the boarding process, to the extent permitted by part 231 of this title.

## $\S 38.99$ Floors, steps and thresholds.

(a) Floor surfaces on aisles, step treads, places for standees, and areas where wheelchair and mobility aid users are to be accommodated shall be slip-resistant.

(b) All thresholds and step edges shall have a band of color(s) running the full width of the step or threshold which contrasts from the step tread and riser or adjacent floor, either light-on-dark or dark-on-light.

## §38.101 Lighting.

(a) Any stepwell or doorway with a lift, ramp or bridge plate shall have, when the door is open, at least 2 footcandles of illumination measured on the step tread, ramp, bridge plate, or lift platform.

(b) The doorways of cars not operating at lighted station platforms shall have outside lights which, when the door is open, provide at least 1 foot-

candle of illumination on the station platform surface for a distance of 3 feet perpendicular to all points on the bottom step tread edge. Such lights shall be shielded to protect the eyes of entering and exiting passengers.

#### §38.103 Public information system.

(a) Each car shall be equipped with an interior public address system permitting transportation system personnel, or recorded or digitized human speech messages, to announce stations and provide other passenger information. Alternative systems or devices which provide equivalent access are also permitted.

(b) [Reserved]

#### §38.105 Priority seating signs.

(a) Each car shall contain sign(s) which indicate that certain seats are priority seats for persons with disabilities and that other passengers should make such seats available to those who wish to use them.

(b) Characters on signs required by paragraph (a) shall have a width-to-height ratio between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10, with a minimum character height (using an upper case "X") of 5% inch, with "wide" spacing (generally, the space between letters shall be 1/16 the height of upper case letters), and shall contrast with the background either light-on-dark or dark-on-light.

### §38.107 Restrooms.

(a) If a restroom is provided for the general public, it shall be designed so as to allow a person using a wheelchair or mobility aid to enter and use such restroom as specified in paragraphs (a) (1) through (5) of this section.

(1) The minimum clear floor area shall be 35 inches by 60 inches. Permanently installed fixtures may overlap this area a maximum of 6 inches, if the lowest portion of the fixture is a minimum of 9 inches above the floor, and may overlap a maximum of 19 inches, if the lowest portion of the fixture is a minimum of 29 inches above the floor, provided such fixtures do not interfere with access to the water closet. Folddown or retractable seats or shelves may overlap the clear floor space at a

lower height provided they can be easily folded up or moved out of the way.

- (2) The height of the water closet shall be 17 inches to 19 inches measured to the top of the toilet seat. Seats shall not be sprung to return to a lifted position.
- (3) A grab bar at least 24 inches long shall be mounted behind the water closet, and a horizontal grab bar at least 40 inches long shall be mounted on at least one side wall, with one end not more than 12 inches from the back wall, at a height between 33 inches and 36 inches above the floor.
- (4) Faucets and flush controls shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf (22.2 N). Controls for flush valves shall be mounted no more than 44 inches above the floor.
- (5) Doorways on the end of the enclosure, opposite the water closet, shall have a minimum clear opening width of 32 inches. Doorways on the side wall shall have a minimum clear opening width of 39 inches. Door latches and hardware shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.
- (b) Restrooms required to be accessible shall be in close proximity to at least one seating location for persons using mobility aids and shall be connected to such a space by an unobstructed path having a minimum width of 32 inches.

#### §38.109 Between-car barriers.

Where vehicles operate in a high-platform, level-boarding mode, and where between-car bellows are not provided, devices or systems shall be provided to prevent, deter or warn individuals from inadvertently stepping off the platform between cars. Appropriate devices include, but are not limited to, pantograph gates, chains, motion detectors or other suitable devices.

# Subpart F—Intercity Rail Cars and Systems

#### §38.111 General.

(a) New, used and remanufactured intercity rail cars, to be considered accessible by regulations in part 37 of

this title shall comply with this subpart to the extent required for each type of car as specified below.

- (1) Single-level rail passenger coaches and food service cars (other than single-level dining cars) shall comply with §\$38.113 through 38.123 of this part. Compliance with §38.125 of this part shall be required only to the extent necessary to meet the requirements of paragraph (d) of this section.
- (2) Single-level dining and lounge cars shall have at least one connecting doorway complying with §38.113(a)(2) of this part connected to a car accessible to persons using wheelchairs or mobility aids, and at least one space complying with §\$38.125(d) (2) and (3) of this part, to provide table service to a person who wishes to remain in his or her wheelchair, and space to fold and store a wheelchair for a person who wishes to transfer to an existing seat.
- (3) Bi-level dining cars shall comply with \$38.113(a)(2), 38.115(b), 38.117(a), and 38.121 of this part.
- (4) Bi-level lounge cars shall have doors on the lower level, on each side of the car from which passengers board, complying with §38.113, a restroom complying with §38.123, and at least one space complying with §38.125(d) (2) and (3) to provide table service to a person who wishes to remain in his or her wheelchair and space to fold and wishes to transfer to an existing seat.
- (5) Restrooms, complying with §38.123 shall be provided in single-level rail passenger coaches and food services cars adjacent to the accessible seating locations required by paragraph (d) of this section. Accessible restrooms are required in dining and lounge cars only if restrooms are provided for other passengers.
- (6) Sleeper cars shall comply with §§38.113 (b) through (d), 38.115 through 38.121, and 38.125, of this part, and have at least one compartment which can be entered and used by a person using a wheelchair or mobility aid and complying with §38.127 of this part.
- (b)(1) If physically and operationally practicable, intercity rail cars shall comply with §38.113(d) of this part for level boarding.
- (2) Where level boarding is not structurally or operationally practicable,